

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/N02004/000384

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F15B11/042 F16L55/136 F16L55/132

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L E21B F15B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 4 854 384 A (CAMPBELL ET AL) 8 August 1989 (1989-08-08) column 1, lines 8-29  column 4, lines 6-55 column 5, line 39 - column 7, line 29 column 9, lines 4-55; figures 1-3,8	1-8,11, 13,14 9,10,12, 15,16
X	DE 196 31 804 A1 (MANNESMANN REXROTH GMBH, 97816 LOHR, DE) 15 January 1998 (1998-01-15) column 1, line 51 - column 2, line 37; figure 1  ----- -/--	1,4,6



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

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Date of the actual completion of the international search

5 April 2005

Date of mailing of the international search report

11/04/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 03/067134 A (CARSPHAIRN LIMITED; EARLY, CIARAN; GAGE, ERIC; MCTAVISH, DOUGLAS; EARL) 14 August 2003 (2003-08-14)	9,10,12, 15,16
A	page 9, line 13 - page 10, line 24 claims 16,17; figures 1-4,13	1,13
A	US 4 272 984 A (BELL ET AL) 16 June 1981 (1981-06-16) abstract column 3, line 9 - column 4, line 2 column 4, lines 45-62; figures 2,3	1,6,13, 15

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Information on patent family members

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			GB 2203214 A ,B	12-10-1988
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			CA 2475585 A1	14-08-2003
			EP 1476688 A2	17-11-2004
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